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Harnessing Information Technology to Improve the Environmental Impact Review Process

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I. INTRODUCTION

In 1970, when the National Environmental Policy Act[1] (NEPA) was enacted, the new and exciting information management technologies were the handheld four-function calculator and the eight-track tape cassette. Three decades later, after the personal computer, the digital revolution, and the World Wide Web, the implementation of NEPA is still stuck in the world of 1970. Despite an "E-Government Strategy,"[2] an "E-Government Act,"[3] the creation of a new Office of Electronic Government within the Office of Management and Budget ("OMB"),[4] and, to focus on the environmental arena, the breathtaking success of the web-based Toxic Release Inventory,[5] the storage and dissemination of environmental impact review documents continue on the original, emphatically non-electronic, model. We would like to suggest several improvements that can and indeed must be made to the environmental impact review process in light of both the technological and legal developments of the last thirty years.

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[1] National Environmental Policy Act of 1969, Pub L. No. 91-190, 83 Stat. 852 (1970), codified at 42 U.S.C. §§ 4321- 4370 (2000).
[2] *See* Executive Office of the President of the United States, Implementing the President's Management Agenda for E-Government: E-Government Strategy (April 2003) (describing successes and challenges in electronic government).
[3] *See* E-Government Act of 2002, Pub. L. No. 107-347, 116 Stat. 2899 (2002).
[4] *See id.* § 101, codified at 44 U.S.C.A. § 3602 (2003).
[5] *See generally* Bradley Karkkainen, *Information as Environmental Regulation: TRI and Performance Benchmarking, Precursor to a New Paradigm?*, 89 GEO. L.J. 257 (2001). The TRI was a good idea that

II. ENVIRONMENTAL DOCUMENTS AND THE INTERNET

The principal requirement of NEPA is that an environmental impact statement (EIS) be prepared for major federal actions that may have a significant effect on the human environment.[6] Unless a particular action falls within a category that agency regulations identify as either always or never requiring an EIS, an agency considering an action must first determine whether an EIS is necessary by preparing an Environmental Assessment (EA).[7] If the agency finds, on the basis of the EA, that the action will not have a significant environmental impact, it makes a Finding of No Significant Impact (FONSI),[8] and the environmental review process comes to a close. If the EA indicates an EIS is necessary, the agency must first prepare a Draft EIS (DEIS), on which it receives comments from the U.S. Environmental Protection Agency (EPA), other relevant state and federal agencies, affected parties, and members of the public. It then issues a Final EIS (FEIS) in which it responds to those comments and modifies the DEIS as necessary, along with a Record of Decision (ROD)[9] that summarizes the decision made, the alternatives rejected, and the steps taken to minimize environmental impacts. As a group, the EA, FONSI, DEIS, FEIS, and ROD are referred to as "environmental documents."[10]

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became a great one because of the perfectly timed development of the ideal tool for dissemination of TRI data: the World Wide Web.

[6] 42 U.S.C. § 4332(2)(C) (2000). This "detailed statement" must address the environmental impact of the proposed action, any unavoidable adverse environmental impacts, alternatives to the proposed action, the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. *Id.*

[7] 40 C.F.R. §§ 1501.4(b), (c), 1508.9(a)(1) (2002) (Council on Environmental Quality regulations).

[8] *Id.* § 1501.4(e).

[9] *Id.* § 1505.2.

[10] The literature on NEPA is voluminous. Useful summaries and assessments include ENVIRONMENTAL POLICY AND NEPA: PAST, PRESENT AND FUTURE (Ray Clark & Larry Canter eds., 1997); DANIEL R. MANDELKER, NEPA LAW & LITIGATION (2d ed. 1992); SERGE TAYLOR, MAKING BUREAUCRACIES THINK: THE ENVIRONMENTAL IMPACT STATEMENT STRATEGY OF ADMINISTRATIVE REFORM (1984); Michael Herz, *Parallel Universes: NEPA Lessons for the New Property*, 93 COLUM. L. REV. 1668 (1993); Bradley C.

A number of states have adopted so-called "mini-NEPAs" that largely resemble the federal statute. Of these, the most advanced, detailed, and frequently litigated, are New York's State Environmental Quality Review Act,[11] the California Environmental Quality Act,[12] and Washington's Environmental Policy Act.[13] Although some of the details, reach, and acronyms vary significantly among the little NEPAs, their overall approach and resulting documentation are much the same as in the federal scheme.

The EIS was born when the most advanced office equipment was the Selectric typewriter. Word processors did not yet exist, much less the Internet. The entire federal government contained a grand total of only 5,277 computers.[14] It was the world of the printed page. Thus, EISs were based on the model of the Sears catalog – a hard copy of a massive paper document. When Richard W. Sears issued his first catalogue in 1887, he relied heavily on an emergent technology of information dissemination – Rural Free Delivery.[15] But a little more than a century later his successors abandoned the comprehensive catalogue, concluding that the internet was a far more efficient and less expensive method of selling their goods, and launched sears.com as their predominant method of out-of-store sales.[16]

Karkkainen, *Toward a Smarter NEPA: Monitoring and Managing Government's Environmental Performance*, 102 COLUM. L. REV. 903 (2002).

[11] N.Y. ENVTL. CONSERV. LAW §§ 8-0101 to -0117 (McKinney 2003).

[12] CAL. PUB. RES. CODE §§ 21000-21177 (West 2003).

[13] WASH. REV. CODE §§ 43.21C.010 - 43.21C.910 (2002).

[14] S. Rep. No. 104-272, at 8 (1996). That number has since increased almost a thousand fold; federal agencies now use more than 4 million computers. Memorandum from Mitchell E. Daniels, Jr., OMB Director, to Heads of Departments and Agencies (June 2, 2003). Thus, the civilian workforce has twice as many computers as people. *See* U.S. Office of Personnel Mgt., Demographic Profiles of the Federal Workforce 5 (May 20001) (reporting that as of September 30, 2000, there were 1,755,689 civilian employees of the federal government).

[15] DANIEL J. BOORSTIN, THE AMERICANS: THE DEMOCRATIC EXPERIENCE 127-29 (1973).

[16] SEARS ANNUAL REPORT 2001 (showing timeline of company history spread across unnumbered pages). Appropriately, the company's 2001 Annual Report has on its cover a photograph of a woman sitting at the breakfast table, wearing a watch (the original product sold by Richard Sears), and sitting at her computer, checking out sears.com, no doubt.

There is no reason to believe that EIS readers are less computer savvy than Sears customers, yet the EIS is still stuck in the technology of 1970. The result is an enormous forgone opportunity to make EISs more effective, usable, and valuable. We will argue that both sound policy and existing legal requirements obligate federal agencies to post EISs to the web.

A. Drawbacks of the Hard Copy EIS

Reliance on paper EISs has a number of drawbacks. While individual agencies in individual instances have taken advantage of the web to disseminate EISs, most have not. This has several negative effects.[17]

1. *Accessibility and Expense*

EISs are typically hundreds or thousands of pages long, with the larger ones divided into several volumes with many oversized and colored maps, charts and other illustrations. As a result they are quite expensive to reproduce and distribute. Thus, for projects that have garnered any degree of public interest, copies cannot be made for everyone who is interested. Instead, people must physically visit a library to review a copy, or pay a copying fee that can easily approach or exceed one hundred dollars.[18] This significantly reduces actual public access to EISs, especially in an era where library hours are being shortened to fill municipal budget gaps, and few people have the time to visit libraries anyway.

The very process of writing the EIS serves one core function of NEPA, which is to inform the agency prior to its taking a proposed action. A completed EIS that sits in an

[17] For similar critiques and assessments, see E.J. Koford, *Environmental Impact Reports on the Internet,* Envtl. Monitor, Apr. 7, 1996, *available at* http://ceres.ca.gov/planning/ead/CEQA_net.html (last visited July 30, 2003); Robert Twiss, Why Environmental Documents Should be Digital and On-Line, *available at* http://www.regis.berkeley.edu/whyeir2.html (last visited July 30, 2003).

agency office or reading room may be meaningfully available to agency personnel in that office. But informing select agency personnel is not the sole function of the EIS process. NEPA documents and the information generated in their production can be important to other decisionmakers and to the world at large. Even within the agency, information should be made as available and accessible as possible. An agency employee in a different section, or who arrives five years after an EIS is completed, may be unaware of what has been done and where it can be found. Most important, one of the ways in which preparation of an EIS informs the agency is through public comment. Effective public comment in turn depends on the ready and timely availability of documents upon which to comment.[19]

2. *Availability*

Despite their enormous bulk, in one sense EISs have proven "ephemeral"[20] – once produced, they seem almost to evaporate. Simply because they are so big, it is expensive to store many of them. Sooner or later, the preparing agency will just toss the old ones; for example, the Federal Highway Administration's official policy is to destroy EISs thirteen years after final approval.[21] The Council on Environmental Quality receives all NEPA EISs, but it does not maintain them in any sort of library. The EPA is also

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[18] Twiss, *supra* note __.

[19] As the Supreme Court has written:

> Section 102(2)(C) thus serves twin aims. The first is to inject environmental considerations into the federal agency's decisionmaking process by requiring the agency to prepare an EIS. The second aim is to inform the public that the agency has considered environmental concerns in its decisionmaking process. Through the disclosure of an EIS, the public is made aware that the agency has taken environmental considerations into account.

Weinberger v. Catholic Action of Hawaii/Peace Education Project, 454 U.S. 139, 143 (1981).

[20] Twiss, *supra* note __ (lamenting that "[u]nder current practice, environmental documents are ephemeral" because not archived).

[21] *See* US Dep't of Transportation, Federal Highway Administration, Records Disposition Manual, ch. 4, *available at* http://www.fhwa.dot.gov/legsregs/directives/orders/envi-reg.htm (last visited July 31, 2003).

mandated to comment on most draft EISs,[22] but it maintains only a limited historical library. EPA headquarters in Washington maintains a microfiche collection of final EISs filed from 1970 through 1977 and all draft, final, and supplemental EISs filed from 1978 through 1990.[23] To view the microfiches, one must either travel to Washington or rely on interlibrary loan -- two cumbersome, expensive, and time-consuming options. The most comprehensive collection of federal EISs is private; it is found at the Northwestern University Transportation Library in Evanston, Illinois. Almost all federal EISs, dating back to NEPA's inception, can be found here, for the most part in both draft and final form, along with other environmental documents.[24] While this is an extraordinary and comprehensive collection, it is also unique; there is only one place in the United States in which these documents can be found. Individual agencies often have copies of EISs they prepared, but not reliably so and finding an older EIS remains a hit or miss proposition.

The situation is similar at the state level. New York State Department of Environmental Conservation (DEC) by law must be sent copies of all EISs prepared under the State Environmental Quality Review Act (SEQRA).[25] Yet it does not keep them all. Several years' worth of EISs were lost in a flood at an offsite storage facility, and many were discarded when DEC moved to a new headquarters building in Albany in 2001.[26] California maintains a state Clearinghouse to which are sent all Environmental Impact Reports (EIRs) prepared under the California Environmental Quality Act

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[22] 42 U.S.C. § 7609 (2000).
[23] *See* USEPA, Obtaining Environmental Impact Statements, http://www.epa.gov/compliance/nepa/obtaineis/index.htm (last visited May 15, 2003).
[24] The list of EISs at this library can be searched by following the links at www.library.northwestern.edu/transportation/searcheis.html (last visited September 1, 2003).
[25] N.Y. COMP. CODES R. & REGS. tit. 6, § 617.12(b)(6) (2002).
[26] Personal communication with Jack Nasca, New York State Department of Environmental Conservation, September __, 2003.

(CEQA). Yet "the Clearinghouse has never functioned as either a repository or a library."[27]

Finally, most EISs are prepared by private consulting firms. While these firms generally keep their own files of old EISs on which they worked, such collections are not comprehensive, publicly accessible, catalogued, or unified.

Preparation of an EIS typically costs hundreds of thousands of dollars (sometimes only tens of thousands, and sometimes millions) and involves the compilation of large amounts of original data about the natural and human environments. Because not systematically maintained, this information is often lost forever.

3. *Finding Information Within an EIS*

EISs are barely searchable internally and not at all externally. EISs always have tables of contents but rarely indexes, and thus it is often difficult to find a particular piece of information within the document. There is no master index of EISs, much less of their contents, and thus researchers have no way of knowing, at least without extraordinary effort, that a particular subject has already been studied in one (or many) prior EISs. Thus, the EIS is not a user-friendly document. The EIS has become less helpful to all but the most intense readers as it has become more unwieldy and enormous. As EISs have grown ever bulkier over the years, it has become a common complaint that the goal is not so much to inform as to smother. In order to make an EIS "litigation-proof," "agencies have an incentive to overstuff the EIS with information from every available source, regardless of its quality, so as to achieve a protective layer of redundancy or 'overkill' while at the same time inoculating themselves against the charge that they overlooked

[27] Koford, *supra* note __.

relevant information."[28] The resulting difficulties are significantly compounded by the impossibility of doing precise, focused, efficient searches within an EIS. This impedes the ability to comment on a DEIS or to make effective use of an FEIS.

4. *Portability*

EISs are not exactly portable. It is not easy to lug multi-volume behemoths from one place to another or to review them while traveling. Indeed, one of us recalls a former chair of the New York City Planning Commission throwing her back out and requiring hospitalization after attempting to lift an especially large EIS.

5. *Delay*

The environmental review process, even if it involves only an Environmental Assessment leading to a Finding of No Significant Impact rather than a full-fledged EIS, is notoriously lengthy. There are many reasons for this, but part of the problem is the fact that the documents must be produced in hard copy format. Before a DEIS or FEIS actually reaches the eyes of an interested party, it must be printed, reproduced, and sent by snail mail to a library or other repository. This occurs at each stage of a multi-stage proceeding, resulting in an ever compounding delay.

[28] Karkkainen, *supra* note __, at 922; *see also* H. Welles, *The CEQ NEPA Effectiveness Study: Learning from Our Past and Shaping Our Future*, *in* ENVIRONMENTAL POLICY AND NEPA: PAST, PRESENT AND FUTURE 193, 201 (Ray Clark & Larry Canter eds., 1997) (noting finding of CEQ-sponsored study that agency officials produced what they themselves saw as excessively lengthy and detailed EISs out of fear of litigation). For a listing of decisions under the New York State Environmental Quality Review Act where trial-level courts struck down the environmental review documents for major projects because of perceived omissions of particular information, only to be reversed on appeal, *see* Michael B. Gerrard & Monica Jahan Bose, *Possible Ways to Reform SEQRA*, N.Y. L.J., Jan. 23, 1998, at 3. Such decisions often lead to lengthy and expensive delays in project constructions, and induce counsel to advise their clients to write long EISs so that no holes can be found. *See also* Stewart E. Sterk, *Environmental Review in the Land Use Process: New York's Experience with SEQRA*, 13 CARDOZO L. REV. 2041, 2069-71, 2081-83 (1992).

6. *EISs as Self-Contained, Isolated Documents*

The California Environmental Quality Act declares it to be the policy of the state that "[i]nformation developed in individual environmental impact reports be incorporated into a data base which can be used to reduce delay and duplication in preparation of subsequent environmental impact reports."[29] This is a noble, and sensible, aspiration. Rather than reinventing the wheel with each EIS, preparers could draw on the work of those who preceded them. For it to come to pass, however, that work must be available and accessible. As we have already seen, that is not the case. The "data base" anticipated by the California legislature has never been established; nor is there an equivalent in other states or at the federal level. This has two consequences. First, and most obvious, it means a lot of unnecessary work takes place as the authors of EISs reinvent the wheel, duplicating investigations that have already occurred. Second, it makes it very difficult to evaluate either an EIS or the project it assesses over time, or in comparison to other projects. The completed EIS disappears. As Bradley Karkkainen has written:

> [B]ecause EISs are produced on a sporadic, ad hoc, and largely project-specific basis, each document is a unique and self-contained universe of information. . . . Rarely is it possible to make meaningful comparisons, or to aggregate or synthesize information across multiple EISs, over time, or among agencies with disparate NEPA practices. Because such idiosyncratic documents cannot be used to generate comparative benchmarks, cumulative assessments, or longitudinal analyses of environmental performance trends, EISs create no broader context for evaluating the particular projects they accompany. Nor do they provide the basis for assessments of government's environmental performance in the aggregate or over time.[30]

[29] CAL. PUB. RES. CODE § 21003(d) (West 2002). *See also id.* § 21003(e) (stating policy that "[i]nformation developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations").
[30] Karkkainen, *supra* note __, at 923.

The EIS is in this way a purely prospective document, the theory being that it will inform a decision yet to be made. Rarely does anyone suggest that it has a significant function *after* the relevant action has taken place. However, EISs are potentially both valuable and relevant after the fact. First, they contain an enormous amount of information, often compiled at great effort and expense. Second, they describe, and rest on, certain assumptions about the action itself, predictions about its effects, and undertakings with regard to the mitigation of its impacts. In the real world, much of that is forgotten once the EIS and the project it describes are complete. Only rarely does anyone go back and check whether the impacts that were predicted in EISs turned out to resemble the impacts that actually occurred. NEPA contains no requirement for post-EIS verification. This failure to review the assumptions and undertakings that led to a project going ahead is not *only* the result of the fact that the EIS itself is filed away and forgotten, but that is part of the explanation. At the least, accessible and searchable EISs are a necessary, though not sufficient, condition for meaningful ex post review.

B. Advantages of the On-Line EIS

There is no reason for this situation to persist. Every EIS today is produced on word processing equipment. It is altogether straightforward to submit environmental documents in electronic format and then load them on a server, making them immediately available to the whole world for free. As we discuss in Part C, below, the agencies actually doing so are a distinct minority, but there are enough to demonstrate both its feasibility and its usefulness.

Electronic distribution of EISs would significantly improve if not outright eliminate each of the foregoing problems. It would be much less expensive than making and distributing hard copies. The EISs would be immediately available to everyone who wanted them, inside the government and out. Public access to environmental documents through the Internet would enormously enhance the ease of and opportunities for public comment and participation in environmental decisionmaking

Preparing an electronic version does take time, to be sure; however, copying and distribution is instantaneous. EISs could be permanently stored with virtually no storage space. The EISs could be electronically searchable, so that researchers everywhere could learn what subjects have already been studied and what data have been compiled. EIS preparers could also readily see others had analyzed particular kinds of impacts. In preparing EISs for electronic distribution, links could be provided to source material, bibliographic references, analysis methodologies, and other information and data that would be useful to readers.

One objection to the electronic dissemination of official information is the "digital divide" – the problem that many low income people do not have access to computers or know how to use them.[31] That problem is rapidly disappearing, however. More and more young people, even in low-income communities, are learning how to use computers, and computers are declining in price. Moreover, for the cost of making a few dozen copies of a big EIS, an agency could supply a computer terminal and an internet connection to the nearest library. We are also not saying that hard copies of EISs should be eliminated entirely; a copy of each EIS could still be made available at a library or government

[31] *See* Mark Warschauer, *Demystifying the Digital Divide: The simple binary notion of technology haves and have-nots doesn't quite compute*, SCI. AM. 42 (August 2003).

office for those who cannot or will not use a computer, and hard copies should also be furnished to those relatively few people who will want to review the document closely.

Information in the files of the agencies on particular projects should also be made available electronically. Currently such information is often available only through the Freedom of Information Act[32] and its state counterparts. But it often takes agencies months or even years to comply with requests under these statutes; by the time a member of the public receives the information she has requested, the comment period on the subject project will have long passed.

An electronic library of EISs and related information could be to the 21st Century what the great natural history museums have been since the 19th century – vast repositories of expensively collected and categorized information that is of great value to researchers and to the public.

Finally, if EISs were readily accessible *after* a project went ahead, it is more likely that both members of the public and government officials would monitor the predictions and commitments made therein. This suggestion has both a technical and a legal side. As to the first, there should be some systematic effort to check the predictions made in EISs. Doing so is not as easy as with stocks or sports or Oscars, where anyone can instantly check the results. It will require some physical monitoring. But a start might be to require EISs that will look at a condition that was the subject of a prior EIS to see if that prior EIS got it right.[33] Simply having EISs electronically available would

[32] 5 U.S.C. § 552 (2000).

[33] For example, if New York University wants to erect a new building at Washington Square Park, and it needs to do an EIS on the building because a discretionary governmental action is involved, NYU should be required to look at the old EISs for other buildings nearby, see what predictions they made, and see how closely today's reality reflects those conditions. That way the authors of the new EIS will know if they can just use the same methodologies that were used the last time, or if they have to devise new methods.

enable and to some extent stimulate a shift toward review of past predictions, although more would be required.

The legal side of a retrospective examination of an EIS involves the implementation (or lack thereof) of the project proponent's mitigation commitments. Many EISs state that specific actions will be taken to mitigate the environmental impacts. A wetland that has to be disturbed for a construction project will be restored; or the timing of certain traffic signals will be adjusted; or a building's plaza area will be maintained for public use. There is no good mechanism to make sure that those mitigation commitments are actually fulfilled. Anecdotal evidence suggests that often they are not.[34] Indeed, it has been our experience that the mitigation commitments for different projects sometimes directly conflict. For example, it is common for projects in New York that will create localized traffic congestion to be accompanied by pledges to alter the timing of the nearby traffic signals as a means of reducing that congestion.[35] In reality the pledges for different projects are often inconsistent with each other – for example, some may require more green light time for north-south traffic while others may require more green light time for east-west traffic – and there is no adequate mechanism for monitoring these promises and making sure they are consistent and obeyed.

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[34] Jerold S. Kayden *et al.*, Privately Owned Public Space: The New York City Experience (2000) (demonstrates that many of the public plazas that were created by developers in exchange for rights to erect larger buildings have fallen into disrepair or not fully opened to public use as required). *See generally* D.P.Wallace & J.S. Shalkowski, *Post-National Environmental Policy Act Monitoring of Environmental Impacts and Mitigation Commitments*, TRANSPORTATION RESEARCH RECORD, No. 1626, at 31-37(National Academy Press, Washington, D.C.).

[35] Wilkinson v. Planning Bd. Of Thompson, 680 N.Y.S.2d 710 (App.Div. 1998); N.Y. St. Dep't of Env. Conservation, In the Matter of the Applications of THE PYRAMID CROSSGATES COMPANY filed in connection with a proposed regional shopping mall to be located in the City of Albany and the Town of Guilderland, Albany County, New York, Department of Environmental Conservation Project No. 401-0113, 1981 N.Y. ENV LEXIS 27, June 25, 1981.

Whether mitigation commitments are administratively or judicially enforceable is beyond the scope of this paper.[36] However, we would support procedures for monitoring and enforcing such commitments. One indispensable aspect of any such procedures, of course, is readily available information about what commitments have been made. Having EISs readily accessible and searchable in electronic format would go far towards making that possible. Indeed, it would not be difficult to create a separate database of mitigation commitments and a program to see if they are actually carried out.

C. Current Practice

The advantages of on-line distribution of environmental documents have not been lost on all state and federal agencies. While the practice remains ad hoc, haphazard, and disappointingly limited, a number of agencies have started to post EISs and comparable documents to their websites.

At the federal level, the Department of Energy is at the forefront in this regard and is something of a model. The Department has been posting environmental documents on its web site since 1994, when its Office of NEPA Policy and Compliance set up the federal government's first NEPA web site.[37] DOE's website[38] contains an impressive

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[36] The issues are usefully examined in Thomas O. McGarity, *Judicial Enforcement of NEPA-Inspired Promises*, 20 ENVTL. L. 569 (1990).

[37] Email from Eric Cohen, US Dep't of Energy, to Michael Gerrard, July 25, 2003. Exactly what drove DOE's unusual enthusiasm for computer access is somewhat unclear. It occurred during a time of renewed commitment to NEPA in general at the Department, following a prior period in which the DOE was often accused of maintaining a perfunctory, dismissive, "pseudo-NEPA" program. *See* National Academy of Public Administration, Managing NEPA at the Department of Energy (July 1998). During the 1990's, Energy Secretaries James Watkins and Hazel O'Leary undertook NEPA obligations with new vigor and seriousness. Our speculation is that the confluence of agency heads with a general commitment to transparency, the political need to distance the Department from its unhappy past, the resulting willingness to embrace rather than flee NEPA obligations, and the exciting technological developments of the mid to late 1990s combined to lead DOE to the forefront here.

Secretary O'Leary issued a Policy on Public Participation in 1994, just when the Department initiated its NEPA website. *See* US Dep't of Energy, Policy on Public Participation, DOE P 1210.1 (July 29, 1994), *available at* http://www.directives.doe.gov/pdfs/doe/doetext/oldord/1210/p12101.pdf (last

amount of NEPA information, some general and some specific to the agency, in addition to electronic copies of a wide range of environmental documents. One agency official explains:

> The purpose of web-publishing NEPA documents and maintaining the DOE NEPA Web site is to foster efficiency in the Department's implementation of the NEPA process, so that the process is more useful to decision makers and the public. Timely posting of NEPA documents not only helps the public to participate in the NEPA process (e.g., to comment on a draft document), but also helps DOE and other agencies in preparing new NEPA documents.[39]

Under DOE's internal NEPA policy, set out in DOE Order 451.1B, the "NEPA Compliance Officer" responsible for any given project must provide the central Office of NEPA Policy and compliance "promptly – generally, within two weeks of their availability – five copies and one electronic file" of an EA, proposed FONSI, draft or final EIS, ROD, and mitigation action plan and corresponding mitigation report.[40] The Order does not explicitly require that the electronic version of these documents be posted to the agency's website, but that has long been the practice. While access to DOE documents has been restricted since September 11, the site remains a striking example of the advantages of using the web to make available environmental documents.

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visited July 31, 2003). That policy did not mention the website specifically, but in an accompanying memorandum O'Leary stated that the "Department will work to establish, announce, and manage topical data bases of reliable, timely information available to the public through telephone and computer access." Memorandum from Hazel O'Leary, Secretary of Energy, to All DOE Employees, Regarding Guidance on Implementation of the Department's Public Participation Policy at 3 (July 29, 1994). The Department's so-called "Gold Book," which first appeared in December 1994, endorses the use of "computer bulletin boards, e-mail, Internet, and similar forms of communication to provide members of the public that use this medium with easy, inexpensive access to information about DOE activities, including meetings and availability of documents," noting that "[t]o this end, the DOE NEPA Web site was created on the World Wide Web to make the NEPA process more useful to decisionmakers and the public." US Dept' of Energy, Office of NEPA Policy and Assistance, Effective Public Participation Under the National Environmental Policy Act (2d ed. Aug. 1998), available at http://tis.eh.doe.gov/nepa/tools/guidance/pubpart2.html (last visited July 31, 2003).

[38] The website can be found at http://tis.eh.doe.gov/nepa/ (last visited July 31, 2003).

[39] Cohen email, *supra* note __.

[40] US Dep't of Energy, Order 451.1B (Oct. 26, 2000), § 5.d(11).

Other federal agencies have not done as well. While there are numerous individual EISs to be found on the web[41] (though still only a tiny portion of the 30,000 that have been prepared over the last three decades[42]), no other agency has equaled the systematic and comprehensive effort found at DOE.

At the state level, California seems to have taken most advantage of the web. For example, the California Water Transit Authority has posted the Environmental Impact Report (the state equivalent of an EIS) for proposed expansion of ferry service in the San Francisco Bay area.[43] The state Department of Transportation ("Caltrans") posts environmental documents in both HTML and PDF within the page for the relevant district.[44] Other examples can be found. Most importantly and impressively, the California Resources Agency has established the California Environmental Resources Evaluation System ("CERES"), which it describes as "an information system . . . to facilitate access to a variety of electronic data describing California's rich and diverse environments."[45] A number of environmental documents can be found on the website, along with a huge amount of legal, technical, and geographic information. While the

[41] A completely random sampling includes the Surface Transportation Board's EIS for the Powder River Basin Expansion Project, *available at* http://www.stb.dot.gov/EIS/DME/DME_Final_EIS.htm; the Forest Service's Sierra Nevada Framework Environmental Impact Statement, http://www.fs.fed.us/r5/snfpa/library/archives/feis/index.htm, as well as a June 2003 Draft Supplemental EIS, http://www.fs.fed.us/r5/snfpa/draft-seis/index.htm; the Federal Highway Administration's DEIS for the Beartooth Highway in Montana, http://www.cflhd.gov/projects/wy/beartooth/DEIS.cfm; the EA and FONSI for the Air Force's Quick Reaction Launch Vehicle Program, http://ast.faa.gov/lrra/environmental/coop/qrlv/QrlvEaF.pdf; and the Federal Highway Administration's Boulder City/US 93 Corridor Project, http://www.bouldercitystudy.com/.

[42] The 30,000 figure is given in a hard-to-find EPA document entitled "Total Number of Environmental Impact Statements Filed with EPA," which is cited in Karkkainen, *supra* note __, at 905 n.6.

[43] http://www.watertransit.org/eir_download.shtml (last visited July 31, 2003).

[44] So, for example, environmental documents for projects in District 7, which includes Los Angeles, can be found at http://www.dot.ca.gov/dist07/pubs/enviro_docs.shtml (last visited July 31, 2003).

[45] The quote is found on the home page of the CERES website, http://ceres.ca.gov/ (last visited July 31, 2003).

catalogue of environmental documents is somewhat haphazard and incomplete, the website is an extraordinary step in the right direction.

The closest New York has come to following California's lead is via the website of the New York State Department of Public Service, where the Department has posted on-line applications to build major new electric generating plants.[46] These applications contain EIS-level information. The Lower Manhattan Development Corporation, a state agency which is planning the redevelopment of the area devastated by the attacks of September 11, 2001, is now preparing an EIS and posting the key documents on its web site.[47] The New York State Department of Environmental Conservation (DEC) has slowly been expanding its website to include more useful environmental information. For example, it recently established a web page concerning ongoing site investigation and remediation efforts at the contaminated site of a former IBM facility in Endicott, New York.[48] It may be that in the foreseeable future, DEC will significantly expand its reliance on electronic dissemination of EISs. Just this year the Department adopted a policy on "environmental justice and permitting," under which DEC staff is to draft "regulations to require the electronic submission of environmental impact statements."[49]

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[46] *See* http://www.dps.state.ny.us/articlex.htm (last visited September 2, 2003).
[47] *See* http://www.renewnyc.com (last visited September 2, 2003).
[48] *See* http://www.dec.state.ny.us/website/dshm/sldwaste/endicottfacts.htm (last visited July 31, 2003).

The preparation of environmental site assessments designed to determine if hazardous substances may be present at particular locations is another opportunity for effective use of the Internet. Under 2002 amendments to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), entities that prepare site assessments that meet established standards are entitled to certain protections from CERCLA liability. 42 U.S.C.A. §§ 9601(35)(B), 9601(40)(B), 9607(b)(3) (2003). Some states require that environmental site assessments be submitted to the government. In conjunction with the effort to put EISs on the web, there should also be a requirement to submit in electronic form all environmental site assessments that go to the government. (We are not advocating that all such assessments be required to go the government, for that would inhibit many parties from preparing them; but we do believe that if such assessments do go to the government, they should be put on line unless legitimate considerations of confidentiality dictate otherwise.)

[49] DEC, *CP-29: Environmental Justice and Permitting*, ¶III(B)(13) (March 19, 2003), *available at* www.dec.state.ny.us/website/ej/ejpolicy.html.

Some municipalities are posting EISs on the web,[50] and a law adopted by the New York City Council in 2003 will require that EISs prepared by or for City agencies be posted on the web.[51] At present, however, electronic dissemination of environmental documents remains quite underdeveloped in New York State.

III. LEGAL REQUIREMENTS

Not only *should* agencies be posting EISs to the web, we believe that in general they are required to do so under existing law. Our focus is on federal law; however we note in passing certain state and municipal requirements that also can be read to impose an obligation to post environmental documents on the web.

A. NEPA

In its typically bare-bones fashion, NEPA itself is rather silent on the question of distribution of an EIS. But not totally so. It requires that an EIS "shall be made available to . . . the public as provided by" the Freedom of Information Act.[52] This sentence can be read in two subtly different ways. First, it might be broken in two: the agency shall make EISs available to the public and in doing so shall comply with, and benefit from the exemptions contained in, FOIA. This is the reading it has generally received and is reflected in, among other things, the CEQ regulations.[53] Alternatively, the statute might

[50] For example, the city of White Plains, NY, has posted the draft EIS for an urban redevelopment project to its website. *See* http://www.cityofwhiteplains.com/news/releases/221main/221main.htm.
[51] N.Y.C. Local Law No. 11, § 2 (2003) (amending § 1133(a) of the New York City Charter to provide that the Department of Records and Information Services shall "make available to the public on or through the department's website" every agency "report, document, study and publication" that is required by local, state, or federal law to be published, issued, or transmitted to the City Council or the Mayor).
[52] 42 U.S.C. § 4332(2)(C) (2000).

[53] *See* 40 C.F.R.§§ 1502.19 (2002) (requiring circulation of DEIS and FEIS to, among others, any private party who asks), 1506.6 (detailing, among the "other requirements of NEPA," agency obligations to involve and inform the public).

be read to mean that the agency's obligation to provide EISs to the public is no more and no less than its obligation to provide other "records" under FOIA. Under this reading, the importance of this provision is only that it establishes that an EIS is an agency "record" for FOIA purposes, and all questions of availability and distribution are FOIA questions, not NEPA questions. The first of these readings is addressed in this section; the second will be considered in Part 3, below.

As noted, the general understanding is that NEPA itself imposes an obligation on agencies to "make available" EISs to the public. The CEQ regulations elaborate on this obligation in several ways. First, an agency is required to "circulate the entire draft and final" EIS.[54] If the EIS is especially lengthy, the agency need "circulate" only the summary, but must still provide the entire document to involved agencies, the applicant (if any), anyone who submitted extensive comments, and anyone who asks for a copy.[55] In addition, EISs, comments thereon, and underlying documents must be "ma[d]e . . . available to the public pursuant to the provisions of the Freedom of Information Act."[56] This shall be done free of charge if practicable, and in any event at a fee no more than the actual duplication costs.[57]

The regulations are authorized by, and reflect the requirements of, President Nixon's Executive Order 11514. This Order, promulgated just months after NEPA's

[54] *Id.* § 1502.19.
[55] *Id.*
[56] *Id.* § 1506.6(f).
[57] *Id.* This section reads in full: "Agencies shall . . . [m]ake environmental impact statements, the comments received, and any underlying documents available to the public pursuant to the provisions of the Freedom of Information Act (5 U.S.C. 552), without regard to the exclusion for interagency memoranda where such memoranda transmit comments of Federal agencies on the environmental impact of the proposed action. Materials to be made available to the public shall be provided to the public without charge to the extent practical, or at a fee which is not more than the actual costs of reproducing copies required to be sent to other Federal agencies, including the Council." The requirement of notice and public availability applies to all "environmental documents," which includes EISs, EAs, FONSIs, and Notices of Intent, *id.* § 1508.10

enactment and still in force, also imposes an obligation on agencies to make environmental documents available. The E.O. requires agencies to

> [d]evelop procedures to ensure the *fullest practicable provision* of timely public information and understanding of Federal plans and programs with environmental impact in order to obtain the view of interested parties. These processes shall include, whenever appropriate, provision for public hearings, and shall provide the public with relevant information, including information on alternative courses of action.[58]

Finally, individual agencies' NEPA regulations[59] routinely provide that Draft and Final EISs be "made available." For example, the Federal Highway Administration requires that draft EISs "shall be made available to the public."[60] Final EISs are to be "made available" as well and "should also be made available for public review at institutions such as local government offices, libraries, and schools, as appropriate."[61]

In short, under the statute, the regulations, agency interpretations of the regulations, and the Executive Order, agencies must alert the public to the existence of environmental documents and make them available in an effective and timely way. These requirements were not written with electronic documents, let alone the Internet, in

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(definition of "environmental document"), as well as Records of Decision, although the regulations themselves are not explicit with regard to RODs, see 40 Most Asked Questions #34a.

[58]E.O. No. 11514, Protection and Enhancement of Environmental Quality, § 2(b), 35 Fed. Reg. 4247 (Mar. 5, 1970) (emphasis added). This order was amended in technical respects by E.O. 11991, 42 Fed. Reg. 26967 (May 24, 1977).

[59]The CEQ regulations anticipate that each agency "shall as necessary adopt procedures to supplement these regulations." 40 C.F.R. § 1507.3(a) (2002).

[60]23 C.F.R. § 771.123(g).

[61]The regulations provide:

> The final EIS shall be transmitted to any persons, organizations, or agencies that made substantive comments on the draft EIS or requested a copy, no later than the time the document is filed with EPA. In the case of lengthy documents, the agency may provide alternative circulation processes in accordance with 40 CFR 1502.19. The applicant shall also publish a notice of availability in local newspapers and make the final EIS available through the mechanism established pursuant to DOT Order 4600.13 which implements Executive Order 12372. When filed with EPA, the final EIS shall be available for public review at the applicant's offices and at appropriate Administration offices. A copy should also be made available for public review at institutions such as local government offices, libraries, and schools, as appropriate.

mind. The drafters of NEPA and the regulations had in mind the provision of hard copies. To "make available" or to "provide" has always, uncontroversially, meant to have available for review at a public location (e.g., the agency's own offices, a library) or to send a hard copy in the mail. Most attention has instead been focused on giving adequate notice of availability.[62]

What do these requirements amount to in 2003? It is very hard to read them *not* to require posting to an agency website. Indeed, the real question would seem to be whether *hard copies* must also be made available or whether having electronic copies available on the Internet suffices. As the federal government has recognized in other settings, the web is now the most effective, direct, inexpensive, and convenient means for making governmental information "available."[63] In 2003, "to ensure the fullest practicable provision of timely public information"[64] *means* to post it to the web.

At the level of interpretive theory, this claim poses a nice question of "dynamic statutory interpretation."[65] Our suggestion is that the statute and regulations require different conduct than they required when adopted and different conduct than their drafters envisioned. However, as an instance of changing statutory meaning, this one is rather mild. The world has changed in ways that the statutory language easily accommodates; in that sense, the "meaning" of that language has not changed at all, its application has. To use terms common in constitutional interpretation, the "conception" has changed but the "concept" has remained constant.[66] The original conception was

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Id. § 771.125(g). *See also* 10 C.F.R. 1021.313 (Department of Energy)
[62]*See, e.g.*, 40 C.F.R. § 1506.6(b) (2002).
[63] *See generally* E-Government Strategy, *supra* note __.
[64] E.O. 11514, *supra* note __, at § 2(b).
[65]*See generally* WILLIAM N. ESKRIDGE, DYNAMIC STATUTORY INTERPRETATION (1994).
[66] The distinction is most associated with Ronald Dworkin. *See, e.g.*, RONALD DWORKIN, TAKING RIGHTS SERIOUSLY 135-36 (1977). Dworkin gives the example of defining "cruel and unusual punishment"

hard copies on bookshelves that could be sent through what we now call "snail mail." The new conception is electronic copies on websites that can be downloaded through the Internet. In both instances the concept -- meaningful public access to particular documents -- is identical. The only change is that the new conception serves the concept even better than the old.

Many examples of such shifts can be found in statutory cases. To pick one quite close to home, consider the recent consent decree in *Our Children's Earth Foundation v. US EPA*.[67] This was a Clean Air Act citizens' suit in which the plaintiff argued that EPA had a legal obligation to "publish" State Implementation Plans (SIPs).[68] SIPs are notoriously difficult to get a handle on. There may or may not be an actual volume collecting all the numerous and changing requirements in one place;if it exists, that volume is likely out of date and can be found only at the offices of the state environmental agency or the regional office of the EPA, viewable by appointment.[69] However, section 110 of the Act requires EPA to "assemble and publish a comprehensive document for each State setting forth all requirements of the applicable implementation plan for such State."[70] The plaintiffs sought injunctive relief requiring such "publication," though the complaint did not request publication in a particular format or location. The case was resolved by consent decree, in which EPA agreed that it would

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prohibited by the 8th Amendment. He argues that the framers' overall "concept," which involves concerns of basic dignity and reference to contemporary mores, should trump their specific "conception," under which various punishments that we now consider abhorrent were acceptable. The distinction between concept and conception is a good deal less controversial when applied to changing technology than when applied to changing societal values.

[67] No. CO3-1705 (N.D. Cal. 2003).

[68] A SIP consists of the accumulation of all state law requirements that in any way limit or affect the emissions or concentrations of air pollutants for which EPA has established National Ambient Air Quality Standards. Though its requirements are part of state law, a SIP must satisfy minimum requirements set out in the Clean Air Act and must be submitted to EPA for approval. *See* 42 U.S.C. § 7410 (2000).

publish each state's SIP on the web according to a particular schedule.[71] Obviously, this result does not mean that federal agencies are obligated to post EISs and similar documents to the web. It is a consent decree, from a single district court, under a different statute (and one which uses the stronger word "publish" rather than the weaker term "make available"). We offer it only to show how the meaning of a statutory term can easily change in light of changing technology. When section 110 was adopted in 1970, no one in Congress thought that to "assemble and publish a comprehensive document" meant to post it to the worldwide web. Three decades later, the plaintiffs in this lawsuit, the EPA, and a federal judge all rightly concluded that was a reasonable understanding of the statutory term. The same goes for the requirement in NEPA and related regulations that environmental documents be made available.

B. The Paperwork Reduction Act

This reading draws further support from the Paperwork Reduction Act.[72] Although primarily concerned with minimizing the paperwork burden on regulated entities and with establishing oversight of agency information requests by the Office of Management and Budget (OMB), the Act also contains some general provisions concerning the management and dissemination of information.[73] One of Congress's purposes in enacting the PRA was to "provide for the dissemination of public information on a timely basis, on equitable terms, and in a manner that promotes the utility of the

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[69] On the "indeterminacy" and "obscurity" of SIPs, see 1 WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW: AIR AND WATER 259-62 (1986).
[70] *Id.* § 7410(h)(1).
[71] *see* EPA, Notice of Proposed Consent Decree, 68 Fed. Reg. 23457 (May 2, 2003). The consent decree was entered on September 16, 2003. Email from Helen Kang, plaintiff's counsel, to Michael Herz, September 30, 2003.
[72] 44 U.S.C. §§ 3501-3520 (2000).
[73] *See generally id.* § 3506.

information to the public and makes effective use of information technology."[74] In particular, the 1995 Amendments to the Act[75] require every agency[76] to "ensure that the public has timely and equitable access to the agency's public information."[77] "Public information" is a defined term; it clearly extends to environmental documents.[78] Such access is to be ensured by, among other things, "dissemination . . . in an efficient, effective, and economical manner."[79] One might have hoped that agencies did not require a legal mandate to operate in an efficient, effective, and economical manner. In any event, such a mandate they have. Given the state of current technology, in most instances posting to a website is, by a wide margin, the most "efficient, effective, and economical manner" in which to disseminate information, and therefore is required by the PRA.

OMB, which is charged with implementation of the PRA,[80] has endorsed dissemination of agency information in electronic form, although it has not directly addressed EISs and other environmental documents. OMB Circular A-130, first issued

[74]44 U.S.C. § 3501(7) (2000).
[75]Paperwork Reduction Act of 1995, P.L. 104-13, § 2, 109 Stat. 171 (1995), codified at 44 USC §§ 3501-3520 (2000).
[76]"Agency" is defined broadly to include "any executive department, military department, Government corporation, Government controlled corporation, or other establishment in the executive branch of the Government (including the Executive Office of the President), or any independent regulatory agency." .44 U.S.C. § 3502(1) (2000). NEPA's EIS requirement applies to "*all* agencies of the federal government." 42 U.S.C. § 4332(2)(C) (2000) (emphasis added). While NEPA does not otherwise define the "agencies" to which it applies, the "all" indicates that a broad reading is appropriate, and that is what it has received. *See* 40 C.F.R. § 1508.12 (2002) (defining "federal agency" to include all agencies of the federal government, but not Congress, the Judiciary, the President, or staff functions for the President in the Executive Office). No agency subject to NEPA is exempt from the Paperwork Reduction Act, with the possible exception of the Federal Election Commission, which is expressly exempted from the PRA. 44 U.S.C. § 3502(1) (2000).
[77]*Id.* § 3506(d)(1).
[78]*See id.* § 3502(12) (defining "public information" as "any information, regardless of form or format, that an agency discloses, disseminates, or makes available to the public").
[79]*Id.* at § 3506(d)(1)(C).
[80] Indeed, the Office of Information and Regulatory Affairs was created by this legislation. *See* Paperwork Reduction Act, P.L. No. 96-511, § 2(a), 94 Stat. 2814 (1980), current version codified at 44 U.S.C. § 3503 (2000).

in 1985[81] and revised several times since, "contains the most comprehensive statement of executive branch information policy."[82] Adopted under the authority of the PRA, among other statutes, the Circular applies to all federal agencies. As revised in 1993,[83] the Circular provides:

> *Electronic Information Dissemination.* Agencies shall use electronic media and formats, including public networks, as appropriate and within budgetary constraints, in order to make government information more easily accessible and useful to the public. The use of electronic media and formats for information dissemination is appropriate under the following conditions: (a) The agency develops and maintains the information electronically; (b) Electronic media or formats are practical and cost effective ways to provide public access to a large, highly detailed volume of information; (c) The agency disseminates the product frequently; (d) The agency knows a substantial portion of users have ready access to the necessary information technology and training to use electronic information dissemination products; (e) A change to electronic dissemination, as the sole means of disseminating the product, will not impose substantial acquisition or training costs on users, especially State and local governments and small business entities.[84]

This reads like a direct mandate to agencies to post EISs to the web. It seems to us there are only two arguments to the contrary. First, the entire obligation is subject to the large qualifier at the outset: "as appropriate and within budgetary constraints." For the reasons given above, of course, we would consider electronic dissemination more than "appropriate," and not particularly burdensome financially. Second, electronic dissemination is required only if the agency already develops and maintains the information electronically. We would argue that this condition is met simply because EISs are prepared using word processing software on computers. While there is clearly no obligation here to take old, paper EISs and convert them into electronic format, any

[81]Management of Federal Information Resources, 50 Fed. Reg. 52,730 (Dec. 24, 1985) (issuing OMB Circular A-130).
[82]Henry H. Pettit, Jr., *Electronic Freedom of Information*, 50 ADMIN. L. REV. 391, 400 (1998).
[83]*See* Management of Federal Information Resources, 58 Fed. Reg. 36,068 (July 2, 1993).
[84]*Id.* § 8(a)(8), 58 Fed. Reg. at 36,073.

newer document that sits on a hard drive, CD ROM, or floppy disk has been "developed" and is being "maintained" "electronically."

C. The Electronic Freedom of Information Act

NEPA expressly makes the dissemination of EISs subject to the Freedom of Information Act: "Copies of such statement . . . shall be made available . . . to the public as provided by section 552 of Title 5."[85] In effect, then, NEPA itself defines an EIS as a "record" subject to FOIA. That means that, unless subject to one of the exemptions from disclosure, EISs must be provided on request to any person who asks.[86] But FOIA does more than require that records be provided to those who ask. As amended by the 1996 Electronic Freedom of Information Act,[87] FOIA requires certain documents to be posted to the web as part of "electronic reading rooms." Indeed, as one observer has written, the basic thrust of EFOIA was to shift from a system in which requesters endure lengthy delays while waiting for paper copies of records "to a model in which agencies anticipate requests and act to make records (and information on how to find additional records) available over online systems."[88] It is clear that this requirement applies to all, or virtually all, environmental documents.

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[85]42 U.S.C. § 4332(2) (2000). While this provision only explicitly applies to Final EISs, CEQ and other agency regulations and caselaw, supported by common sense, also treat EAs, FONSIs, and DEIS as equally subject to § 552.

[86] 5 U.S.C. § 552(a)(3) (2000) (imposing obligation to provide requested records); *id.* § 552(b) (listing exemptions); *see also* 32 C.F.R. § 775.5 (2002) (Department of Defense regulations concerning nondisclosure of classified information in an EIS); Weinberger v. Catholic Action of Hawaii/Peace Education Project, 454 U.S. 139 (1981) (applying FOIA's national security exemption to release of information in EIS). It should be noted that, after September 11, 2001, many federal and state agencies removed a considerable amount of environmental information from their web pages. The wisdom and necessity of these controversial actions are beyond the scope of this article.

[87]Electronic Freedom of Information Act Amendments of 1996, Pub. L. No. 104-231, 110 Stat. 3048 (1996) (codified at 5 U.S.C. § 552 (2000)).

[88]Michael Tankersley, *Opening Drawers: A Requester's Guide to the Electronic Freedom of Information Act*, LEGAL TIMES, May 19, 1997, at 29. *See generally* Michael E. Tankersley, *How the Electronic Freedom of Information Act Amendments of 1996 Update Public Access for the Information Age*, 50 ADMIN. L.J. 421 (1998).

The Freedom of Information Act divides agency records into three categories. Some items, known as "a(1) material" and including description of agency organization and proposed and final regulations, must be published in the *Federal Register*.[89] A second category, "a(2) material," consists of other important documents that are likely to be the subject of public requests, such as orders in agency adjudications and staff manuals and policy statements.[90] These need not be published but must be made available for public inspection and copying. Agencies have established reading rooms containing these records. All other records are classified as "a(3) material" and must be provided upon request.[91]

EFOIA expanded the reading room concept to require agencies to provide electronic access to all (a)(2) material that was created after November 1, 1996. "[E]ach agency shall make such records available, including by computer telecommunications, or, if computer telecommunications means have not been established by the agency, by other electronic means."[92] In short, if environmental documents are "records," created after November 1, 1996, of the sort that are covered by §552(a)(2), then they *must* be made available in electronic format.[93]

[89] 5 U.S.C. § 552(a)(1) (2000) (requiring each agency to publish in the Federal Register descriptions of the agency, statements of its general policies, rules of procedure, and substantive rules and statements of general policy of general applicability).
[90] *Id.* § 552(a)(2) (requiring each agency to make available for inspection and copying final opinions in agency adjudications, statements of policy and interpretations that were not published in the Federal Register, and staff manuals).
[91] *Id.* § 552(a)(3).
[92] *Id.* § 552(a)(2).
[93] The statute's language indicates that "electronic format" means not only posted to the web but also on floppy disks or CD-ROMs. However, the latter alternative is available only if an agency has not established "computer telecommunications"; at this point, *all* federal agencies have done so.

Environmental documents are clearly "records"; NEPA itself makes them so. Prior to 1996, however, they were generally seen as (a)(3) material.[94] Thus, FOIA itself imposed no affirmative duty on the agency to provide or disseminate EISs unless and until it received a request for them. With the 1996 amendments, however, the scope of (a)(2) changed dramatically; it now extends to "*all* records, regardless of form or format, which have been released to any person [who made a specific request therefor] and which, because of the nature of their subject matter, the agency determines have become or are likely to become the subject of subsequent requests for substantially the same records."[95] In other words, anything that has been or will be requested three times (the initial request plus subsequent "request*s*," plural) must be made available for inspection and copying. Furthermore, any material that must be made available for inspection and copying and was created after November 1996 must be made available electronically. Therefore, any environmental document that has been, or can be expected to be, asked for by three or more people must be posted to the web. It would be the rare EIS that would not be the subject of three requests.[96]

Note that this provision imposes no burden on agencies to place pre-1996 EISs in electronic reading rooms. In addition, the requirement rests not on the nature of an EIS but on the fact that it is or is likely to be requested by at least three people; therefore, if there were an EIS that the agency would expect to be requested by only two or fewer people, then there would be no need to make it electronically available under EFOIA.

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[94] *See, e.g.*, Russell L. Weaver, *Judicial Interpretation of Administrative Regulations: An Overview*, 53 U. CIN. L. REV. 681, 715-716 (1984).

[95] 5 U.S.C. § 552(a)(2)(D) (2000) (emphasis added).

[96] For an example of an agency posting environmental documents to its EFOIA electronic reading room, apparently having reached the same conclusion as the foregoing arguments, see the web page of the Forest Service's Kaibab National Forest, http://www.fs.fed.us/r3/kai/business/manage_ea.html (last visited September 1, 2003).

D. The E-Government Act of 2002

With some fanfare and grand aspirations, but uncertain effects, the E-Government Act of 2002 [97] aims to bring the federal government into the electronic age. The Act established a new Office of Electronic Government, headed by a Senate-approved Administrator, within OMB[98] and requires or encourages government use of the Internet in a wide variety of settings. Section 206 of the bill applies to regulatory agencies. In addition to requiring electronic commenting and docketing in notice-and-comment rulemakings, the new provision imposes a general obligation to post certain documents on the web. The relevant provision states:

> (b) INFORMATION PROVIDED BY AGENCIES ONLINE- To the extent practicable as determined by the agency in consultation with the Director, each agency (as defined under section 551 of title 5, United States Code) shall ensure that a publicly accessible Federal Government website includes all information about that agency required to be published in the Federal Register under paragraphs (1) and (2) of section 552(a) of title 5, United States Code.[99]

It is our contention that this new provision requires agencies to post Environmental Impact Statements, though the issue is uncertain.

This is an extraordinarily poorly drafted provision, which gives rise to two ambiguities in particular. First, it only requires posting of "information about the agency." Read narrowly, that would include only such things as staff manuals, memoranda of understanding, or other items that tell the reader something about the agency, its personnel, and its means of operation. On the other hand, *any* document that an agency produces provides, directly or indirectly, "information about the agency." Thus, a broad reading would treat "information about the agency" as synonymous with

[97] E-Government Act of 2002, Pub. L. No. 107-347, 116 Stat. 2899 (2002).
[98] *Id.* § 101, codified at 44 U.S.C.A. § 3602 (2003).
[99] *Id.* § 206 (b), codified at 44 U.S.C.A. § 3501 note (2003)..

"documents" or "material" or, simply, "information." The latter reading is preferable. For one thing, most material that is covered by sections (a)(1) and (a)(2) is not "information about the agency" in the narrow sense. Second, the general purposes and thrust of the Act support broader coverage, and there is no apparent justification for limiting 206(b) to the organization chart and the agency phone directory.[100]

Finally, an EIS arguably constitutes "information about the agency" even under a relatively narrow reading. By definition, an EIS is a thorough consideration of a project or other undertaking that the agency plans (or that private entities hope the agency will allow to happen). It is a detailed description and analysis of what the agency is up to (or hopes to be up to). That is "information about the agency."

The second drafting defect of section 206(b) is that it applies only to information that is "required *to be published* in the Federal Register under paragraphs (1) and (2) of section 552(a) of title 5, United States Code." The problem here is that 552(a)(2) does not require *anything* to be published in the Federal Register; *only* (a)(1) does that. As discussed above, (a)(2) materials need only be made available. Thus, information "required to be published in the Federal Register under paragraph . . . 2 of section 552(a)" is the null set. Again, two readings are possible here. The literal, and narrower, reading would make this section only applicable to items required to be published in the Federal

[100]A middle reading would be that "information about the agency" refers to material about *rulemaking*. This reading is suggested by the fact that the rest of Section 206 concerns agency rulemakings. It also draws some support from the legislative history; the section-by-section guide to the Senate bill that became the E-Government Act says this provision "[r]equires that agencies post on their websites all information *about the agencies' regulatory proceedings* that is required to be published in the Federal Register." U.S. Senate Comm. on Govtl. Affs., E-Government Act of 2001, Section by Section Analysis, at 3 (emphasis added), *available at* http://www.senate.gov/~gov_affairs/egovsectionbysection.pdf (last visited July 22, 2003). However, this reading is inconsistent with the actual text of the provision and with its title (which is "regulatory agencies," not, for example, "agency rulemaking"). In addition, it renders 206(b) completely redundant with 206(d), which requires maintenance of an electronic docket in the context of rulemaking.

Register. The broader reading would require posting to an agency web site of any material covered by either (a)(1) or (a)(2).

The second reading is preferable. First, under the literal reading the reference to (a)(2) is meaningless, it serves no function. Second, why would Congress have referred to (a)(2) at all if it did not expect the obligation to extend to the materials covered thereby?

The drafting history supports is inconclusive. The original bills in both the House and the Senate clearly would have required website posting of both (a)(1) and (a)(2) material. Each contained an identical provision that would have required agencies to:

> (2) post on the website all information--
> (A) required to be published in the Federal Register under section 552(a)(1) of title 5, United States Code; and
> (B) made available for public inspection and copying under section 552(a)(2) and (5) of title 5, United States Code, after the effective date of this section.[101]

The Senate bill was modified in committee and the reference to subsections (a)(2) and (a)(5) dropped. Thus, as reported out of Committee, and as passed by the Senate, S. 803 required only that each agency website "include all information about that agency required to be published in the Federal Register under section 552(a)(1).[102] On the House side, the provision was also rewritten in committee, with the original clear language replaced by the opaque version that was ultimately passed. It is certainly possible that the House drafters were trying to do what their Senate counterparts did, and just were

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For the section to serve any function, it must require posting of documents other than those that are part of the rulemaking.

[101] H.R. 2458, 107th Cong., § 206(a)(2) (2001) (as introduced); S. 803, 107th Cong., § 206(a)(2) (2001) (as introduced).

[102] S. 803, 107th Cong., § 206(b) (2002) (as passed by Senate). Thus, the final Senate bill was clearly limited only to materials required to be published in the Federal Register.

careless.[103] It is also possible that the drafters were trying to stick with the original requirement and do some in a more condensed and elegant text.

If Section 206(b) of the E-Government Act applies to material that must be made available under (a)(2), and not only material that must be published in the Federal Register under (a)(1), then it requires that EISs be posted to the agency's website. As we saw in the previous section, EISs are indeed covered by 552(a)(2), or at least the huge majority are, since they are records that predictably will be requested by at least three persons.

Even if 206(b) applies only to material that must be published in the Federal Register -- *another* provision of the E-Government Act requires posting of (a)(2) material in the near future. Section 207 calls on the Director of OMB to establish an "Interagency Committee on Government Information."[104] The Committee will develop a set of policies and guidelines for agency websites, which will be followed by agency-specific determinations of what information will be posted to the web. For all the reasons discussed in this Article, we would suggest that the Committee and individual agencies should ensure that EISs and other environmental documents are made available on the web.

Section 207 also imposes a handful of direct requirements for agency websites. By December 17, 2004, OMB is to issue "guidance" that "requires" each agency website to include links to (i) descriptions of the mission and statutory authority of the agency;

[103] The House Report suggests, barely, that this is the case. Its description of the bill states that agencies must "include in a publicly accessible website all information required to be published in the Federal Register under the Freedom of Information Act, at 5 U.S.C. 552(a)(1) & (2)." H. Rep. 107-787 at 69 (2002), reprinted at 2002 U.S. Code Cong. & Ad. News 1880, 1904.

[104] E-Government Act of 2002, P. L. No. 107-347. § 207(c)(1), 116 Stat. 2899 (2002), codified at 44 U.S.C.A. § 3501 note (2003).

(ii) information made available to the public under subsections (a)(1) and (b) of section 552; (iii) information about the organizational structure of the agency; and (iv) the agency's strategic plan.[105] Like section 206, this section also seems to contain a drafting error. Here the problem is the reference to information "made available" under "subsections (a)(1) and (b)." The problem is that subsection 552(b) does not require *any* information to be made available to anyone; to the contrary, it contains the exemptions from FOIA's general requirement to provide records upon request.[106] Read charitably, this provision requires posting of nonexempt (a)(1) material. Under this reading, it has no applications to EISs. However, if that is all it means, it would seem to duplicate Section 206, which requires that (a)(1) information be posted to a website. Nor is there any possible justification for limiting agency's postings to only that tiny fraction of agency documents that are posted in the *Federal Register*. It seems more likely that "(b)" is a typographical or drafting error and should read "(2)." Such an error is certainly imaginable, and a reference to subsection (a)(2) makes much more sense in context than a reference to subsection (b). The provision seems a good candidate for a Corrections Day amendment.

So read, section 207 requires posting of all (a)(2) material, pursuant to OMB guidelines, beginning in December 2004.[107]

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[105] *Id.* § 207(f)(1)(A). OMB's guidance must be issued "[n]ot later than 2 years after the effective date of this title." *Id.* Most of title II of the Act becomes effective 120 days after enactment, *id.* § 402(a)(1), but section 207 becomes effectively upon enactment, *id.* § 402(a)(2). President Bush signed the E-Government Act into law on December 17, 2002.

[106] 5 U.S.C. § 552(b) (2000) (listing 9 types of matters to which "[t]his section does not apply").

[107] Such an understanding of § 207(f) does undercut our argument that § 206(b) requires posting of (a)(2) material. One reading that would give each section independent meaning and effect would be that § 206(b) requires agencies to post all (a)(1) material 120 days after enactment (though only to the extent practicable), then § 207(f) requires posting of all (a)(2) material two years after enactment.

IV. CONCLUSION

By the time this article is published and, appropriately, posted to the website of the *NYU Environmental Law Journal*, much of what we have said may be obsolete. Technology generally and use of the Internet in particular are quickly moving targets. The CEQ Task Force, which is currently engaged in an open-ended consideration of possible NEPA reforms,[108] has received extensive comments on issues concerning technology.[109] We have no doubt that over time the NEPA process will extensively integrate new technologies, and in ways that go beyond what we have described here. The time will come, for example, when geographic information system (GIS) techniques will allow a user to type in a particular location and be presented with comprehensive environmental data for that location, including a list of and links to all EISs previously prepared for the area, a description of predictions those EISs made about future conditions, and a data base of mitigation commitments.

The first step is to get all environmental documents onto the web. For the policy and legal reasons set out above, that should happen now. The above measures, involving use of today's information technologies, will result in an environmental review process that is more effective, democratic, efficient, and, ultimately, protective of the environment.

[108] *See generally* Council on Environmental Quality, National Environmental Policy Act Task Force, 67 Fed. Reg. 45510 (2002) (notice of establishment of task force).
[109] Council on Environmental Quality, Summary of Public Comment: CEQ Review of NEPA at 2-1 to 2-74 (2002) (summarizing of numerous public comments regarding the NEPA process and technology, information management, and information security), available at http://ceq.eh.doe.gov/ntf/catreport/ (last visited October 2, 2003).